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(c) Annual adipic acid production during which N₂O abatement technology (located after the test point) is operating (tons).

(d) Annual process N₂O emissions from adipic acid production facility that is sold or transferred off site (metric tons).

(e) Number of abatement technologies (if applicable).

(f) Types of abatement technologies used (if applicable).

(g) Abatement technology destruction efficiency for each abatement technology (percent destruction).

(h) Abatement utilization factor for each abatement technology (fraction of annual production that abatement technology is operating).

(i) Number of times in the reporting year that missing data procedures were followed to measure adipic acid production (months).

(j) If you conducted a performance test and calculated a site-specific emissions factor according to § 98.53(a)(1), each annual report must also contain the information specified in paragraphs (j)(1) through (7) of this section for each adipic acid production unit.

(1) Emission factor (lb N₂O/ton adipic acid).

(2) Test method used for performance test.

(3) Production rate per test run during performance test (tons/hr).

(4) N₂O concentration per test run during performance test (ppm N₂O).

(5) Volumetric flow rate per test run during performance test (dscf/hr).

(6) Number of test runs.

(7) Number of times in the reporting year that a performance test had to be repeated (number).

(k) If you requested Administrator approval for an alternative method of determining N₂O emissions under § 98.53(a)(2), each annual report must also contain the information specified in paragraphs (k)(1) through (4) of this section for each adipic acid production facility.

(1) Name of alternative method.

(2) Description of alternative method.

(3) Request date.

(4) Approval date.

(l) Fraction control factor for each abatement technology (percent of total emissions from the production unit

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that are sent to the abatement technology) if equation E-3c is used.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 66460, Oct. 28, 2010]

§ 98.57 Records that must be retained.

In addition to the information required by § 98.3(g), you must retain the records specified in paragraphs (a) through (h) of this section at the facility level:

(a) Annual adipic acid production capacity (tons).

(b) Records of significant changes to process.

(c) Number of facility and unit operating hours in calendar year.

(d) Documentation of how accounting procedures were used to estimate production rate.

(e) Documentation of how process knowledge was used to estimate abatement technology destruction efficiency.

(f) Performance test reports.

(g) Measurements, records and calculations used to determine reported parameters.

(h) Documentation of the procedures used to ensure the accuracy of the measurements of all reported parameters, including but not limited to, calibration of weighing equipment, flow meters, and other measurement devices. The estimated accuracy of measurements made with these devices must also be recorded, and the technical basis for these estimates must be provided.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 66461, Oct. 28, 2010]

§ 98.58 Definitions.

All terms used in this subpart have the same meaning given in the Clean Air Act and subpart A of this part.

Subpart F—Aluminum Production

§ 98.60 Definition of the source category.

(a) A primary aluminum production facility manufactures primary aluminum using the Hall-Héroult manufacturing process. The primary aluminum manufacturing process comprises the following operations:

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(1) Electrolysis in prebake and Søderberg cells.

(2) Anode baking for prebake cells.

(b) This source category does not include experimental cells or research and development process units.

§ 98.61 Reporting threshold.

You must report GHG emissions under this subpart if your facility contains an aluminum production process and the facility meets the requirements of either § 98.2(a)(1) or (a)(2).

§ 98.62 GHGs to report.

You must report:

(a) Perfluoromethane (CF₄), and perfluoroethane (C₂F₆) emissions from anode effects in all prebake and Søderberg electrolysis cells.

(b) CO₂ emissions from anode consumption during electrolysis in all prebake and Søderberg electrolysis cells.

(c) CO₂ emissions from on-site anode baking.

(d) You must report under subpart C of this part (General Stationary Fuel Combustion Sources) the emissions of CO₂, N₂O, and CH₄ emissions from each

stationary fuel combustion unit by following the requirements of subpart C.

[74 FR 56374, Oct. 30, 2009, as amended at 75 FR 79155, Dec. 17, 2010]

§ 98.63 Calculating GHG emissions.

(a) The annual value of each PFC compound (CF₄, C₂F₆) shall be estimated from the sum of monthly values using Equation F-1 of this section:

$$E_{PFC} = \sum_{m=1}^{m=12} E_m \quad (\text{Eq. F-1})$$

Where:

E_{PFC} = Annual emissions of each PFC compound from aluminum production (metric tons PFC).

E_m = Emissions of the individual PFC compound from aluminum production for the month "m" (metric tons PFC).

(b) Use Equation F-2 of this section to estimate CF₄ emissions from anode effect duration or Equation F-3 of this section to estimate CF₄ emissions from overvoltage, and use Equation F-4 of this section to estimate C₂F₆ emissions from anode effects from each prebake and Søderberg electrolysis cell.

$$E_{CF4} = S_{CF4} \times AEM \times MP \times 0.001 \quad (\text{Eq. F-2})$$

Where:

E_{CF4} = Monthly CF₄ emissions from aluminum production (metric tons CF₄).

S_{CF4} = The slope coefficient ((kg CF₄/metric ton Al)/(AE-Mins/cell-day)).

AEM = The anode effect minutes per cell-day (AE-Mins/cell-day).

MP = Metal production (metric tons Al), where AEM and MP are calculated monthly.

$$E_{CF4} = EF_{CF4} \times MP \times 0.001 \quad (\text{Eq. F-3})$$

Where:

E_{CF4} = Monthly CF₄ emissions from aluminum production (metric tons CF₄).

EF_{CF4} = The overvoltage emission factor (kg CF₄/metric ton Al).

MP = Metal production (metric tons Al), where MP is calculated monthly.

$$E_{C2F6} = E_{CF4} \times F_{C2F6/CF4} \times 0.001 \quad (\text{Eq. F-4})$$

Where:

E_{C2F6} = Monthly C₂F₆ emissions from aluminum production (metric tons C₂F₆).